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REMARKS

The Official Action dated December 28, 2004 has been received and its contents carefully noted. In view thereof, claim 1 has been canceled and claim 9 has been amended in order to better define that which Applicants regard as the invention. Accordingly, claims 2-20 are presently pending in the instant application with claims 2-8, 14 and (7-20 being withdrawn from further consideration by the Examiner as being directed to a non-elected invention.

With reference now to the Official Action and particularly page 4 thereof. Applicants wish to acknowledge the Examiner's indication that claims 10-13, 15 and 16 have been objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. It is respectfully requested that these claims again be indicated as being allowable over the prior art of record and passed to issue.

With reference now to page 2 of the Office Action, Applicants hereby confirm the election of Species of Figs. 1-5 in response to the election/restriction requirement mailed September 22, 2004. In this regard, with the foregoing amendments it is respectfully submitted that claim 9, written in independent form, is now in proper condition for allowance over the prior art of record. Consequently, it is respectfully submitted that claim 14, 17, 18 and 19 which depend therefrom should likewise now be in condition for allowance in that they include all the limitations of independent claim 9 which Applicants respectfully submitted is allowable over the prior art of record for the reasons discussed in detail hereinbelow. Accordingly, it is respectfully requested that the withdrawal of claims 14, 17, 18 and 19 from consideration be reconsidered and that such claims be passed to issue along with claims 9, 10-13, 15 and 16.

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With reference now to page 3 of the Office Action, claims 1 and 9 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,655,133 issue I to Mikami et al. This rejection is respectfully traversed in that the patent to Mikami et al. neither discloses nor suggests that which is presently set forth by Applicants' claimed invention.

As can be seen from the foregoing amendments, independent claim I has been canceled and claim 9 has been amended in order to better define that which Applicants regard as the invention. Particularly, claim 9 has been rewritten in independent form and includes limitations which are neither disclosed in nor remotely suggested by the patent it. Mikami et al.

Particularly, independent claim 9 recites an engine exhaust particulate after treatment system comprising an exhaust particulate trapping means, exhaust particulate amount detecting means for directly or indirectly detecting the amount of exhaust particulate trapped by the exhaust particulate trapping means, a regeneration means for removing exhaust particulates trapped by the exhaust particulate trapping means by burning when the amount of exhaust particulate detected by the exhaust particulate amount detecting means reaches a predetermined value, a deceleration detecting means for detecting a deceleration condition of the engine and an exhaust flow rate increase means for increasing, as compared to a non removal process, the flow rate of exhaust gases flowing into the exhaust particulate trapping means, when the deceleration condition of the engine is detected by the deceleration detecting means during the removal by burning of exhaust particulates by the regeneration means. Particularly, in accordance with the present invention, under the deceleration condition of the engine, the flow rate of exhaust gases flowing into the exhaust particulate trapping means increases, as compared to a non removal process, during the removal by burning of exhaust particulates by the regeneration means.

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That is, during the removal of the exhaust particulates, the temperature of the exhaust particulate trapping means is high. Under this condition, following the deceler ation of the engine, when the flow rate of the exhaust gas is flowing into the exhaust particulate trapping means decreases, the temperature of the exhaust particulate trapping means excessively rises. To address this problem, in accordance with the present invention the flow rate of exhaust gases flowing into the exhaust particulate trapping means is increased.

With respect to the teachings of Mikami et al., this reference discloses that during the deceleration of the engine, the valve body 71a is positioned at the intermediate position and the exhaust gas flows directly into the catalyst device bypassing the filter as noted in column 24, lines 19-27. Furthermore, Mikami et al. discloses that when the temperature of the catalyst device is predicted to be sufficiently high, the valve body 71a is not all ifted to the intermediate position even when the engine is in a deceleration state. Further, as noted in column 24, lines 58-64, it is not recommended to increase the temperature under these conditions.

That is, when the valve body 71a is positioned at the intermediate position as noted in Fig. 21 of the Mikami et al. reference, the exhaust gases do not flow into the filter 70. In that the valve body 71a is not shifted to the intermediate position, the value body is thus positioned in the interrupting position as shown in Figs. 18 or 20. In this case, the exhaust gas is flowing into the filter 70. Thus, the flow rate of the exhaust gas is flow ng into the filter 70 at the interrupting position is higher than at the intermediate position.

However, Mikami et al. fails to disclose that when the engine is decelerated and the temperature of the catalyst device is high, the valve body 71a is to be shifted from the intermediate position to the interrupting position, but clearly discloses the valve pody 71a is to stay at the interrupting position. In accordance with this structure, the flow rate of the

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exhaust gas flowing into the filter 70 is the same when the engine is decelerating as it is when it is not decelerating. That is, the valve body 71a of Mikami et al. is positioned at the intermediate position or the interrupting position depending on control or non-control of the temperature rise during the deceleration of the engine, and thus the flow rate of the exhaust gases flowing into the filter 70 merely changes. Controlling the temperature rise leads to the release of reductant into the air and increases the fuel consumption. Therefore, when the temperature of the catalyst device is predicted to be sufficiently high, the temperature rise is not controlled in the deceleration state of the engine. However, it does not cause the flow rate of the exhaust gases flowing into the filter 70 to increase. Consequently, it accordance with this structure, the flow rate of the exhaust gases flowing into the filter 70 is the same whether the engine is decelerating or not. Moreover, in accordance with Mikami et al., the flow rate of the exhaust gases does not increase which is contrary to that which is presently set forth by Applicants' claimed invention.

With this in mind, as noted hereinabove in accordance with the present invention, during the deceleration of the engine, the flow rate of the exhaust gases flowing into the exhaust particulate trapping means increases, as compared to the non-removal process, during the removal by burning of exhaust particulates by the regeneration means so as to prevent the temperature of the exhaust particulate trapping means from excessively rising. Clearly, the patent to Mikami et al. fails to disclose or remotely suggest his feature. Accordingly, it is respectfully submitted that Applicants' claimed invention as set forth in independent claim 9 as well as those claims which depend therefrom clearly distinguish over the prior art of record and is in proper condition for allowance. Again, as noted ereinabove, it is respectfully submitted that claims 14, 17, 18 and 19 previously indicated as being

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withdrawn from consideration by the Examiner should be reconsidered by the Examiner and passed to issue along with independent claim 9 as well as dependent claims 10-13, 15 and 16.

Therefore, in view of the foregoing it is respectfully requested that the rejection of record be reconsidered and withdrawn by the Examiner, that claims 9-19 be allowed and that the application be passed to issue.

Should the Examiner believe a conference would be of benefit in expediting the prosecution of the instant application, he is hereby invited to telephone counsel to arrange such a conference.

Respectfully submitted,

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